

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,825	08/06/2003	Akira Nagashima	03500 016040.1	7347
5514	7590 08/15/2006		EXAM	INER
FITZPATRI(	CK CELLA HARPER &	SHAH, MANISH S		
30 ROCKEFE	LLER PLAZA		<u></u>	
NEW YORK, NY 10112			ART UNIT	PAPER NUMBER

2853
DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/634,825	NAGASHIMA ET AL.
Office Action Summary	Examiner	Art Unit
	Manish S. Shah	2853
The MAILING DATE of this commun	nication appears on the cover sheet w	ith the correspondence address
A SHORTENED STATUTORY PERIOD F WHICHEVER IS LONGER, FROM THE N  - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comr  - If NO period for reply is specified above, the maximum si  - Failure to reply within the set or extended period for reply Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF THIS COMMUNI s of 37 CFR 1.136(a). In no event, however, may a munication. tatutory period will apply and will expire SIX (6) MON y will, by statute, cause the application to become Al	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
Status		
<ul> <li>1) ⊠ Responsive to communication(s) file</li> <li>2a) ⊠ This action is FINAL.</li> <li>3) □ Since this application is in condition</li> </ul>	2b) ☐ This action is non-final.	-
Disposition of Claims		
4)	are withdrawn from consideration.  d.  nd 51-53 is/are objected to.  ction and/or election requirement.	
	e: a) accepted or b) objected to ection to the drawing(s) be held in abeyag the correction is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
<ul><li>2. Certified copies of the priority</li><li>3. Copies of the certified copies</li></ul>	documents have been received. documents have been received in A of the priority documents have beer onal Bureau (PCT Rule 17.2(a)).	Application No  n received in this National Stage
Attachment(s)  1)  Notice of References Cited (PTO-892)	4) ☐ Interview	Summary (PTO-413)
2) Notice of Neterlanes Cited (*10-032)  Notice of Draftsperson's Patent Drawing Review (*3) Information Disclosure Statement(s) (PTO-1449 o Paper No(s)/Mail Date	PTO-948) Paper No.	(s)/Mail Date Informal Patent Application (PTO-152)

### **DETAILED ACTION**

### Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1, 38 & 50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,676,254 B2 in view of Shimada et al. (# US 6302530).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is disclosed in the US Patent and is covered by the US Patent, since the US patent and the application are claiming common subject matter, as follows as shown in Table: 1 below.

## TABLE: 1

### # US 6676254 B2 CLAIMS

- 1. A recording method comprising a step of providing an ink from a recording head to a recording medium through a gap provided between the recording head and the recording medium, the ink being supplied to the recording head from an ink tank comprising an ink contact member and the ink contacting the ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii) and; which has a solubility parameter of not less than 15; and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member comprises at least one compound selected from the group consisting of polyacetate and polyolefin.

### # 10/634,825 CLAIMS

- 1. A recording method comprising a step of providing an ink from a recording head to a recording medium through a gap provided between the recording head and the recording medium, the ink being supplied to the recording head from an ink tank comprising an ink contact member and the ink contacting the ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

- 38. An ink cartridge comprising an aqueous ink and ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

- 50. An ink tank comprising an aqueous ink, an ink container and ink holding member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

With respect to claim 1, the pending application claiming the recording method steps, which is almost same as of US patent.

However, the pending application claimed a compound, which is not compatible with (ii), which is broader limitation than the US Patent, so this limitation still can read by the US Patent claim.

It was obvious to one of ordinary skill in the art at the time of invention was made to use the ink composition of the US Patent in to the recording method of pending application to get the printed image.

With respect to claims 1, 38 & 50 the pending application claiming (1) the ink cartridge including the ink composition, (2) The ink holding member includes polypropylene.

Shimada et al. teaches that to store the ink, recording apparatus need ink cartridge (ink holding member), wherein ink-holding member is made of polypropylene (column: 8, line: 25-45), which has a low permeability to vapor, and because of that ink can maintain their quality for an extended period of time.

It was obvious to one of ordinary skill in the art at the time of invention was made to use the ink composition taught in the US Patent in to the ink cartridge of Omata et al. to get the low coast ink cartridge, and because of the low permeability to vapor, the ink can maintain their quality for an extended period of time (column: 8, line: 40-45).

Application/Control Number: 10/634,825 Page 5

Art Unit: 2853

3. Claim 1, 38 & 50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,676,254 B2 in view of Omata et al. (# US 5953031).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is disclosed in the US Patent and is covered by the US Patent, since the US patent and the application are claiming common subject matter, as follows as shown in Table: 2 below.

# TABLE: 2

#### # US 6676254 B2 CLAIMS

- 1. A recording method comprising a step of providing an ink from a recording head to a recording medium through a gap provided between the recording head and the recording medium, the ink being supplied to the recording head from an ink tank comprising an ink contact member and the ink contacting the ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii) and; which has a solubility parameter of not less than 15; and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member comprises at least one compound selected from the group consisting of polyacetate and polyolefin.

#### # 10/634,825 CLAIMS

- 1. A recording method comprising a step of providing an ink from a recording head to a recording medium through a gap provided between the recording head and the recording medium, the ink being supplied to the recording head from an ink tank comprising an ink contact member and the ink contacting the ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

- 38. An ink cartridge comprising an aqueous ink and ink contact member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

- 50. An ink tank comprising an aqueous ink, an ink container and ink holding member, wherein the ink comprises
  - (i) a fluorescent coloring material;
  - (ii) a nonionic surfactant;
- (iii) a compound which is not compatible with (ii); and
- (iv) a liquid medium for dissolving or dispersing (i), (ii) and (iii), and

wherein the ink contact member is an inkholding member made of polypropylene.

With respect to claim 1, the pending application claiming the recording method steps, which is almost same as of US patent.

However, the pending application claimed a compound, which is not compatible with (ii), which is broader limitation than the US Patent, so this limitation still can read by the US Patent claim.

It was obvious to one of ordinary skill in the art at the time of invention was made to use the ink composition of the US Patent in to the recording method of pending application to get the printed image.

With respect to claims 1, 38 & 50 the pending application claiming (1) the ink cartridge including the ink composition, (2) The ink holding member includes polypropylene.

Omata et al. teaches that to store the ink, recording apparatus need ink cartridge (ink holding member), wherein ink-holding member is made of polypropylene (column: 6, line: 50-62).

It was obvious to one of ordinary skill in the art at the time of invention was made to use the ink composition taught in the US Patent in to the ink cartridge of Omata et al. to get the low coast ink cartridge, and because of the high transparency of the polypropylene, the users to visually check an ink remaining amount for convenience of use (column: 6, line: 50-62).

### Allowable Subject Matter

4. Claims 4-18, 20-22, 25-37,39-49 & 51-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/634,825 Page 8

Art Unit: 2853

# Response to Arguments

- 5. Applicant's arguments filed 07/05/2006 have been fully considered but they are not persuasive.
- 6. With respect to claim rejection of Nagashima et al. (254) in view of Omata et al. Applicant argued that the Omata et al. reference and Nagashima et al. reference did not suggest or teach that the ink holding member comprises polypropylene, which is not persuasive. Omata et al. clearly teaches in column: 6, line: 52-61 that "Furthermore, because of small welding area described above, a material, such as polypropylene (P.P.), polybutylene-telephthanol (P.B.T.) or the like, which has high gas barrier capacity to be ideal as a material for the ink tank container but is difficult to use for poor welding ability, can be certainly welded. Particularly, since P.P. material is low in material cost and has high transparency, the tank container formed of the PP material permits the user to visually check an ink remaining amount for convenience of use." So Omata et al. teaches that the ink holding member is made of polypropylene.

Nagashima et al. expressively discloses that the ink holding member made of polyacetate or polyolefin; and the ink of Nagashima et al. is a fluorescent ink.

Nagashima et al. explicitly disclose that to hold the fluorescent ink, you can use any kind of polymer material. However, the new reference Omata et al. explicitly teaches that P.P. material is low in material cost and has high transparency, the tank container formed of the PP material permits the user to visually check an ink remaining amount

Application/Control Number: 10/634,825

Art Unit: 2853

for convenience of use." So Omata et al. teaches that the ink holding member is made of polypropylene. So one of the skilled artisans would know to modify the ink holding member of Nagashima et al. to Omata et al. So it is obvious to modify the ink container of Nagashima et al. with polypropylene taught by Omata et al. reference.

Page 9

7. With respect to claim rejection of Nagashima et al. (254) in view of Shimada et al. Applicant argued on page 10 of the argument that "the without some specific teaching that polypropylene is an advantageous or suitable material for constructing ink tank and holding an ink containing a fluorescent coloring material." which is not persuasive. Nagashima et al. expressively discloses that the ink holding member made of polyacetate or polyolefin; and the ink of Nagashima et al. is a fluorescent ink. Nagashima et al. explicitly disclose that to hold the fluorescent ink, you can use any kind of polymer material. However, the new reference Shimada et al. explicitly teaches in column: 8. line: 40-45 that with the low vapor permeability of the polypropylene, ink can maintain their quality for an extended period of time, and Shimada et al. teaches that you can hold any kind of ink, they are not limited any particular ink. So one of the skilled artisans would know to modify the ink holding member of Nagashima et al. to Shimada et al. So it is obvious to modify the ink container of Nagashima et al. with polypropylene taught by Shimada et al. reference.

Application/Control Number: 10/634,825 Page 10

Art Unit: 2853

### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/634,825

Art Unit: 2853

Page 11

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mánish S. Shah Primary Examiner Art Unit 2853

MSS

8/8/06